

Amendment to the Claims

1-46. (Canceled)

47. (Currently Amended) A method for controlling content playback related information in a network including a server, a playing device, and at least one control device, the at least one control device being used for controlling the server and the playing device, the server and the playing device configured in either a push mode or a pull mode, the method being performed by the at least one control device and comprising:

    matching a protocol and a data format between the server and the playing device, the server and the playing device configured in the pull mode;

    requesting the playing device matched with the server in the protocol and the data format to receive and render media content streamed from the server,

    wherein transport state information is associated with a streaming status of the media content and is used by an audio/video (AV) transport service and the AV transport service is used for controlling a transport flow of the media content,

    wherein rendering state information is associated with a rendering status of the media content and is used by a rendering control service and the rendering control service is used for controlling a dynamically configurable video and/or audio characteristic of the playing device, and

    wherein when the server and the playing device are configured in the pushpull mode, both the AV transport service and the rendering control service are executed by the playing device;

    transmitting, when playback of the media content by the playing device is paused, a request to the playing device to transmit the transport state information and the rendering state information pertaining to a volume value of the paused media content to the at least one control device, the transport state information including a transport flow status of the media content at the time of pausing the media content, and the rendering state information including a video and/or audio characteristic value of the playing device at the time of pausing the media content; and

requesting the server to store in the server, the transport state information transmitted from the playing device to the at least one control device, and the rendering state information including the volumevideo and/or audio characteristic value of the playing device transmitted from the playing device to the at least one control device,

wherein the at least one control device performs a resuming playback operation from a paused part of the paused media content when playback of the paused media content is resumed by the playing device,

wherein the resuming playback operation comprises:

receiving the stored transport state information and the stored rendering state information from the server,

transmitting a first command including the stored transport state information received from the server to the playing device to set the playing device with the stored transport state information included in the first command,

transmitting a second command including the stored rendering state information received from the server to the playing device to set the playing device with the stored rendering state information included in the second command, and

wherein the media content is streamedtransported from the server to the playing device according to the set transport state information such that the media content is streamedtransported from the paused part of the media content indicated by the transport flow status included in the transport state information and is rendered in the playing device according to the set rendering state information such that the playing device renders the streamedtransported media content using the stored-volume-value-transmitted from the servervideo and/or audio characteristic value of the playing device included in the rendering state information.

48. (Previously Presented) The method of claim 47, further comprising comparing the protocol and the data format between the playing device and the server to prepare a connection between the playing device and the server.

49. (Canceled)

50. (Canceled)

51. (Previously presented) The method of claim 47, wherein the transport state information and rendering state information are stored in the server with identification information for identifying the stored transport information and rendering state information.

52. (Currently Amended) An apparatus for controlling a server and a playing device included in a network in order to control content playback related information, the server and the playing device configured in either a push mode or a pull mode, the apparatus comprising:

a control unit configured to:

match a protocol and a data format between the server and the playing device, the server and the playing device configured in the pull mode,

request the playing device matched with the server in the protocol and the data format to receive and render media content streamed from the server,

wherein transport state information is associated with a streaming status of the media content and is used by an audio/video (AV) transport service and the AV transport service is used for controlling a transport flow of the media content,

wherein rendering state information is associated with a rendering status of the media content and is used by a rendering control service and the rendering control service is used for controlling a dynamically configurable video and/or audio characteristic of the playing device, and

wherein when the server and the playing device are configured in the pushpull mode, both the AV transport service and the rendering control service are executed by the playing device,

transmit, when playback of the media content by the playing device is paused, a request to the playing device to transmit the transport state information and the rendering state information pertaining to a volume value of the paused media content to the control unit, the transport state information including a transport flow status of the media content at the time of pausing the media content, and the rendering state

information including a video and/or audio characteristic value of the playing device at the time of pausing the media content, and

request the server to store in the server, the transport state information transmitted from the playing device to the control unit, and the rendering state information including the volumevideo and/or audio characteristic value of the playing device transmitted from the playing device to the control unit,

wherein [[the]] the control unit performs a resuming playback operation from a paused part of the paused media content when playback of the paused media content is resumed by the playing device,

wherein the resuming playback operation comprises:

receiving the stored transport state information and the stored rendering state information from the server,

transmitting a first command including the stored transport state information received from the server to the playing device to set the playing device with the stored transport state information included in the first command,

transmitting a second command including the stored rendering state information received from the server to the playing device to set the playing device with the stored rendering state information included in the second command, and

wherein the media content is streamedtransported from the server to the playing device according to the set transport state information such that the media content is streamedtransported from the paused part of the media content indicated by the transport flow status included in the transport state information and is rendered in the playing device according to the set rendering state information such that the playing device renders the streamedtransported media content using the stored volume value-transmitted from the serveraudio and/or video characteristic value of the playing device included in the rendering state information.

53. (Previously Presented) The apparatus of claim 52, wherein the protocol and the data format between the playing device and the server are compared to prepare a connection between the playing device and the server.

54. (Canceled)

55. (Canceled)

56. (Previously presented) The apparatus of claim 52, wherein the transport state information and the rendering state information are stored in the server with identification information for identifying the stored transport state information and rendering state information.

57. (Canceled)

58. (Canceled)